

## Ortis KJ-027

# Ortis Automatic Water Level Controller KJ-027 Instruction Manual

Model: KJ-027

## 1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Ortis Automatic Water Level Controller, Model KJ-027. This device is designed to manage water levels in various applications, including aquariums, fish tanks, swimming pools, and sump pump pits, offering automatic water refilling, draining, and water change functionalities.

## 2. SAFETY INFORMATION

- Read all instructions carefully before installation and operation.
- Ensure the power supply matches the specifications of the controller.
- Do not immerse the main control unit in water.
- Keep the device away from children.
- Disconnect power before performing any maintenance or adjustments.
- This product is intended for indoor use in dry locations unless otherwise specified for specific components.
- In case of pump failure or discharge pipe blockage, the built-in alarm will activate. Address the issue promptly.

## 3. PRODUCT OVERVIEW AND COMPONENTS

The Ortis Automatic Water Level Controller KJ-027 consists of a main control unit, two water level sensors (HI and LO), and power cords. The control unit features power outlets for connecting pumps, control buttons, and an LED display.



Figure 3.1: Main components of the Ortis Automatic Water Level Controller, including the control unit, HI and LO sensors, and power plug.



Figure 3.2: Close-up of the control unit showing the MUTE, MANUAL, FILL, DRAIN, AUTO buttons, and the LED display. Also highlights the adjustable sensors and 304 stainless steel sensor material.

- **Main Control Unit:** Houses the electronics, power outlets (DRAIN and FILL), LED display, and control buttons (MUTE, MANUAL, FILL, DRAIN, AUTO).
- **HI Sensor:** High water level sensor.
- **LO Sensor:** Low water level sensor.
- **Power Cords:** For connecting the unit to a power source and pumps to the unit.

## 4. SETUP AND INSTALLATION

The Ortis Automatic Water Level Controller is designed for easy installation without plumbing modifications. All necessary installation tools are included.

### 4.1 Mounting the Control Unit

- Choose a dry, accessible location near your aquarium, tank, or pool.
- Use the provided screws and wall anchors to mount the control unit securely to a wall or cabinet. Alternatively, use the included adhesive pads for temporary or non-permanent mounting.

## EASY INSTALATION FOR BOTH FRESH & MARINE AQUARIUMS

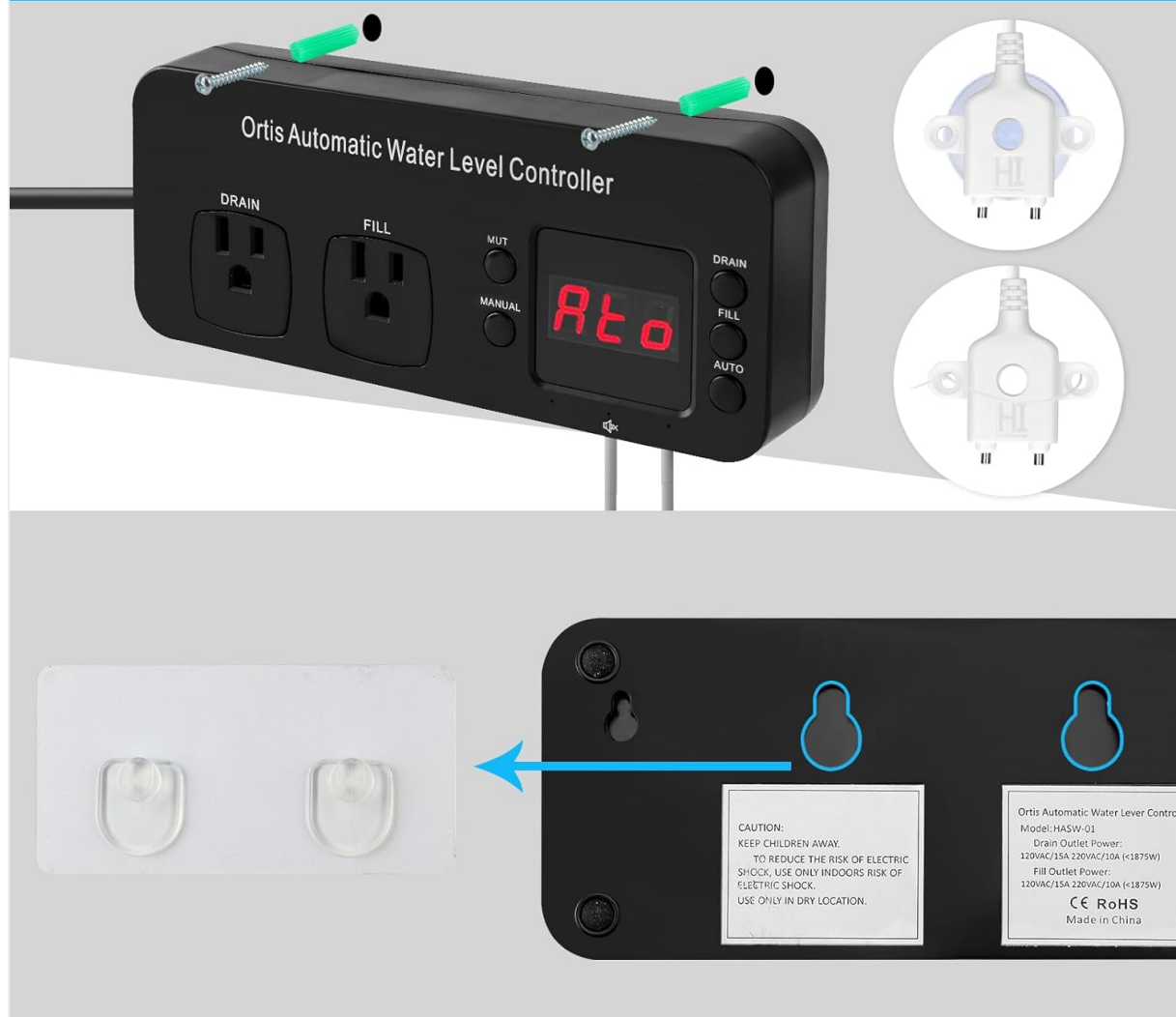


Figure 4.1: Illustration of mounting the control unit using screws or adhesive pads.

### 4.2 Sensor Placement

The HI and LO sensors detect water levels. Their placement determines the operating range for filling and draining. The sensors are adjustable from 1/4 inch to 20 inches.

- Attach the HI and LO sensors to the inside wall of your aquarium or tank using the provided suction cups.
- Position the LO sensor at the desired minimum water level. When the water drops below this sensor, the FILL pump will activate (in appropriate modes).
- Position the HI sensor at the desired maximum water level. When the water reaches this sensor, the FILL pump will deactivate, and the DRAIN pump will activate (in appropriate modes).
- Ensure the sensors are securely attached and their cables are routed safely to the control unit.



Figure 4.2: Example of HI and LO sensors installed within an aquarium to monitor water levels.



Figure 4.3: Overview of product features, highlighting the adjustable range of the sensors.

### 4.3 Connecting Pumps

- Connect your refill pump to the "FILL" outlet on the control unit.
- Connect your drain pump to the "DRAIN" outlet on the control unit.
- Ensure pumps are compatible with the controller's maximum capacity (Max 2Hp, 16A).

## 5. OPERATING INSTRUCTIONS

The controller offers four operating modes: Automatic Water Change, Fill, Drain, and Manual.

### 5.1 Mode Selection

Use the buttons on the control unit to select the desired mode:

- **AUTO:** Activates the automatic water change function.
- **FILL:** Activates the automatic water refilling function.
- **DRAIN:** Activates the automatic water draining function.
- **MANUAL:** Allows manual control of the connected pumps.

### 5.2 Automatic Water Change Mode



In AUTO mode, the controller manages both draining and refilling to perform a water change. The system will drain water until the LO sensor is exposed, then refill until the HI sensor is reached.

- Press the **AUTO** button to initiate an automatic water change cycle.
- The DRAIN pump will activate until the water level drops below the LO sensor.
- Once the LO sensor is clear, the FILL pump will activate until the water level reaches the HI sensor.
- The cycle completes when the HI sensor is covered.



Figure 5.1: Illustration of the automatic water change process using the AUTO mode, showing the controller connected to both drain and fill pumps.

### 5.3 Fill Mode

In FILL mode, the controller maintains the water level by activating the refill pump when the water drops below the LO sensor and deactivating it when the water reaches the HI sensor.

- Press the **FILL** button.
- The FILL pump will activate if the water level is below the LO sensor.
- The FILL pump will deactivate when the water level reaches the HI sensor.

# Ortis Automatic Water Level Controller

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Figure 5.2: Illustration of the fill operation. The pump turns on when water is below the LO sensor and turns off when it reaches the HI sensor.

## 5.4 Drain Mode

In DRAIN mode, the controller activates the drain pump when the water level reaches the HI sensor and deactivates it when the water drops below the LO sensor. This mode is also suitable for sump pump applications.

- Press the **DRAIN** button.
- The DRAIN pump will activate if the water level is above the HI sensor.
- The DRAIN pump will deactivate when the water level drops below the LO sensor.

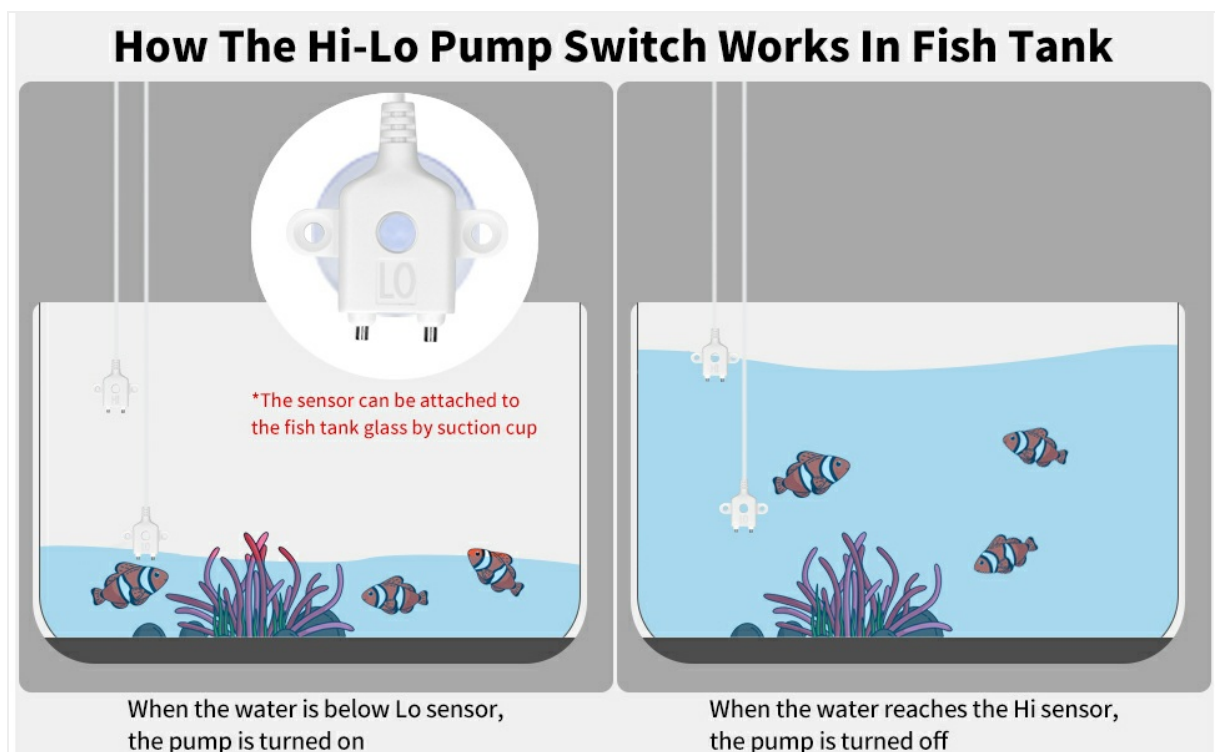


Figure 5.3: Illustration of the drain operation in a sump pit. The pump turns on when water reaches the HI sensor and turns off when it drops below the LO sensor.



## 5.5 Manual Control Mode

The MANUAL mode allows you to manually activate or deactivate the connected pumps.

- Press the **MANUAL** button.
- Further presses of the FILL or DRAIN buttons will toggle the respective pumps on or off, overriding sensor input.
- Return to an automatic mode (AUTO, FILL, DRAIN) to resume sensor-based operation.

## 5.6 Alarm and Mute Function

The controller includes a built-in alarm to notify you of potential issues such as pump failure or blockage. The LED display provides clear indications.

- If an alarm sounds, check the connected pumps and plumbing for any obstructions or malfunctions.
- Press the **MUTE** button to silence the alarm temporarily if needed.

## 6. MAINTENANCE

- The HI-LO dual sensors are constructed from 304 stainless steel, designed to be resistant to corrosion and not affected by minerals or water debris. They generally do not require cleaning.
- Periodically inspect all cables and connections for wear or damage.
- Ensure the control unit remains dry and free from dust.

## 7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Controller not powering on.	No power supply; loose connection.	Check power plug connection; ensure outlet is functional.
Pump not activating in automatic mode.	Incorrect mode selected; sensor not triggered; pump malfunction; clogged hose.	Verify mode (FILL/DRAIN/AUTO); check sensor placement and water level; test pump manually; inspect hoses for blockages.
Alarm sounding.	Pump failure; discharge pipe blockage; water level not changing as expected.	Inspect pumps and plumbing; clear any blockages; verify sensor function. Press MUTE to silence.
Water level not maintained accurately.	Improper sensor placement; sensor malfunction.	Adjust HI/LO sensor positions; ensure sensors are clean and unobstructed.

## 8. SPECIFICATIONS





Brand	Ortis
Model Number	KJ-027
Material	Stainless Steel (Sensors)
Power Source	Corded Electric

Max Pump Capacity	2 Hp, 16A
Item Weight	0.65 Kilograms (1.42 pounds)
Package Dimensions	9.61 x 3.78 x 3.23 inches
Sensor Adjustment Range	1/4 inch to 20 inches

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the product packaging or contact the manufacturer directly. Details regarding specific warranty periods and support channels are typically provided at the point of purchase or on the manufacturer's official website.

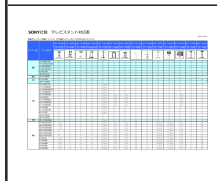
Related Documents - KJ-027

	<p><a href="#">Ortis HWHC-01 In-Wall Humidity Controller Instructions and Manual</a></p> <p>Comprehensive instructions and manual for the Ortis HWHC-01 In-Wall Humidity Controller. Learn about its features, installation, operation modes, and specifications for optimal humidity control in your home.</p>
	<p><a href="#">Ortis HWHC-01 In-Wall Humidity Controller User Manual</a></p> <p>User manual for the Ortis HWHC-01 In-Wall Humidity Controller, detailing its features, installation, operation, safety precautions, and specifications for managing indoor humidity levels.</p>
	<p><a href="#">Sony TV Help Guide Access - Model Compatibility</a></p> <p>Access the official Sony web help guide for detailed operating instructions for various Sony TV models. Find the correct URL and model compatibility information.</p>
	<p><a href="#">Sony SU-WL850</a></p> <p>SU-WL850 (KJ-75X9500H, KJ-65X9500H, KJ-55X9500H)</p>



[FUTECH 027.03D MULTICROSS 3D BRAVE GREEN Laser Level User Manual and Specifications](#)

Comprehensive user manual and technical specifications for the FUTECH 027.03D MULTICROSS 3D BRAVE GREEN laser level. Covers device overview, operation, safety, battery, leveling, tilt mode, receiver mode, and technical details.



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